STEREO POWER AMPLIFIER

KM-107 KM-207

INSTRUCTION MANUAL

KENWOC

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Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.

We appreciate your patronage and take pride in the long tradition of quality components, that our company represents.

So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features, and system-connection considerations, so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability, we have sought to anticipate your needs and desires.

Keep this manual handy for future reference.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____ Serial Number _

Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Contents	Caution: Read the following pages marked in 🛕 carefully to keep your safety.		
△ Before applying power △ Safety precautions		Controls, indicators and connecting the case of difficulty	
△ Important safeguards	3-4	Specifications	

Before applying power

Important!

U.S.A., Canada, and Australia

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only. Units shipped to the Australia is designed for operation on 240 volts AC only. These units are not equipped with an AC voltage selector switch and the discussion of such a switch that follows should be disregarded.

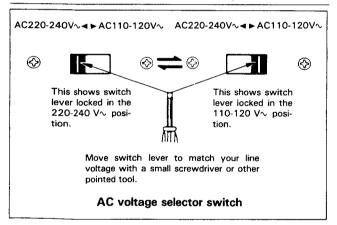
All other countries

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC voltage selection

This unit operates on 110-120 or 220-240 volts AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.



Safety precautions

Safety precaution for AC plug (for U.S.A and Canada)

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

WARNING:

TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS AP-PLIANCE TO RAIN OR MOISTURE.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SER-VICING TO QUALIFIED SERVICE PERSONNEL.



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



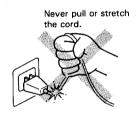
THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

⚠ Caution: Read this page carefully to keep your safety.

Important safeguards

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

- **1. Power sources** The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- **2. Power-cord protection** Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

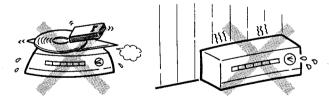




- 3. Grounding or polarization Precautions that should be taken so that the grounding or polarization means of this unit is not defeated.
- **4. Ventilation** The unit should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.

Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.



5. Water and moisture - The unit should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

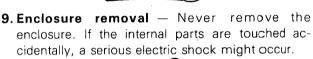




- 6. Temperature The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above $+5^{\circ}C$ (41°F).
- 7. Heat The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.

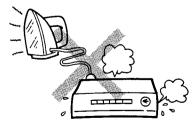


8. Electric shock — Care should be taken so that object do not fall and liquid are not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.





10. AC outlets - Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.



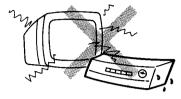
The maximum capacities indicated for the AC outlets on the rear panel of the this unit are as follows.

1. SWITCHED outlets

: 100 W (Total)

2. UNSWITCHED outlet ; 100 W

11. Magnetic fields — Keep the units away from a source of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.



12. Cleaning — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.



13. Nonuse periods — The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

14. Abnormal smell — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service station.



- **15. Damage requiring service** The unit should be serviced by qualified service personnel when:
 - **A.** The power-supply cord or the plug has been damaged; or
 - **B.** Objects have fallen, or liquid has been spilled into the unit; or
 - C. The unit has been exposed to rain; or
 - **D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
 - **E.** The unit has been dropped, or the enclosure damaged.
- **16. Servicing** The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
- 17. Outdoor antenna grounding If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/ NFPA No. 70—1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.
 - ^a Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copper-clad steel or bronze wire, or larger, as a ground wire.
 - ^b Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 - 6 feet (1.22 - 1.83 m) apart.
 - ^c Mount antenna discharge unit as close as possible to where lead-in enters house.
 - ^d Use jumper wire not smaller than No. 6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).
- **18. Power lines** An outdoor antenna should be located away from power lines.

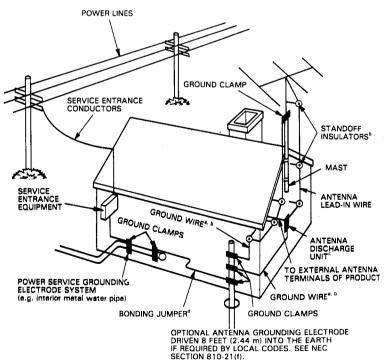
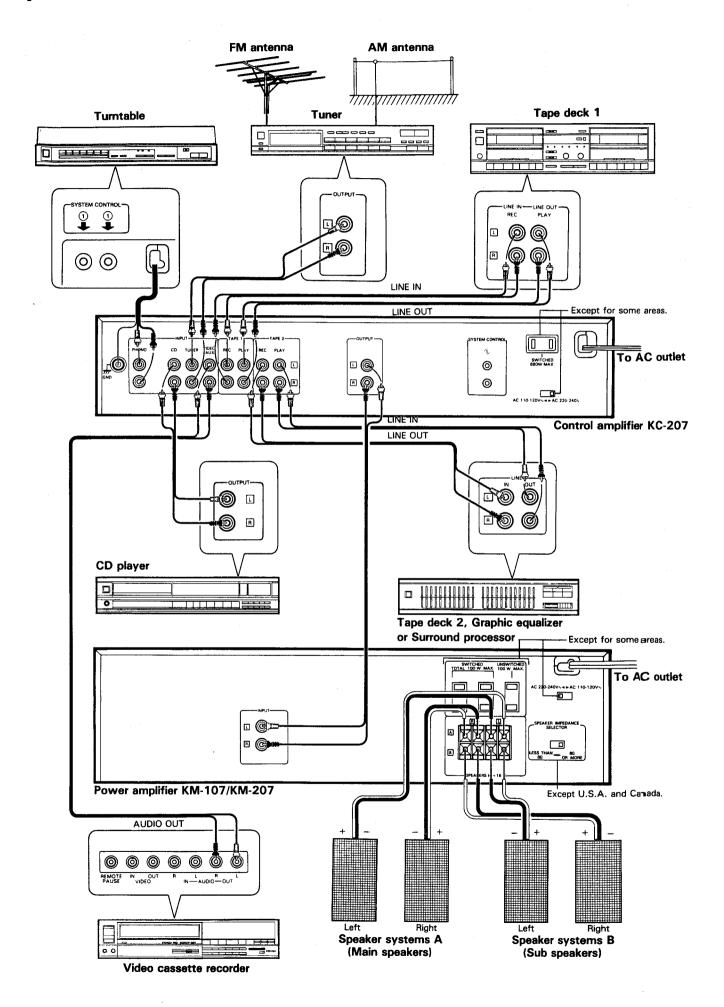


FIGURE EXAMPLE OF ANTENNA GROUNDING ACCORDING TO THE NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 — "RADIO AND TELEVISION EQUIPMENT"

Notes:

- 1. Item 3 is not required except for grounded or polarized equipment.
- 2. Item 10 is not required except for units provided with AC outlets.
- 3. Item 17 and 18 are not required except for units provided with antenna terminals.

System connections



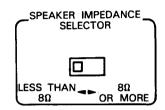
Speakers

This amplifier has two pairs of speaker terminals, SPEAKERS A and SPEAKERS B.

Setting SPEAKER IMPEDANCE SELECTOR (Except U.S.A. and Canada)

According to the impedance of the speakers used, set the SPEAKER IMPEDANCE SELECTOR at rear as follows.

4 Ω, 6 Ω 8 Ω, 16 Ω "LESS THAN 8 Ω "
"8 Ω OR MORE"



Notes:

- During speaker system connection and operation of SPEAKER IM-PEDANCE SELECTOR, set the POWER switch to OFF.
- Check that the connected lead wires of the speaker systems do not contact with other jacks or terminals.
- When only one set of speakers is used. Use the SPEAKERS A terminals.

WARNING!

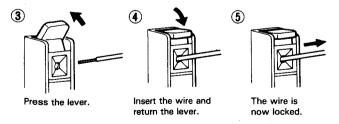
Particular attention must be given to making good electrical contact at the amplifier-output and speaker terminals. Poor or loose connections can cause sparking or burning at the terminals because of the very high power that the amplifier can deliver. Follow these steps carefully.

Connecting speaker cords

1. Stripe the insulation from the cord as shown below.



Depress the terminal knob upward or down ward as shown below and fully insert the cord into the slot. Then, return the knob to lock the cord.



Speaker lead connection

3. After connection, pull the speaker cord lightly to check that the connection is secure.

INPUT jacks

Connect these jacks and the OUTPUT jacks of a control amplifier with audio cables equipped with pin plugs on each end.

Note:

To prevent possible trouble, always disconnect the power plug or turn off the POWER switch before connecting or disconnecting the audio cables.

AC outlets (Except for some areas)

The AC outlets on the rear panel may be used to supply power to other components in the system, such as turntables, tape decks, etc. Never connect equipment whose power consumption exceeds the maximum value shown at each outlet.

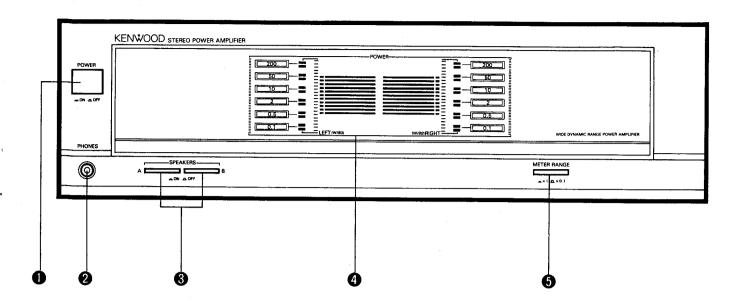
SWITCHED outlets: These outlets supply power only when the unit is turned on. The maximum total capacity (both outlets) is 100 watts.

UNSWITCHED outlet: The outlet provides power when the unit is plugged into an active AC wall outlet, regardless of the setting of the POWER switch. The maximum capacity is 100 watts.

Note: -

Be sure to connect the speaker cords before connecting the AC $\ensuremath{\mathsf{OUTLET}}.$

Controls, indicators and connectors



POWER switch

Press the power switch to turn on the power. To turn the power off, press the switch again to set it to the out position.

2 PHONES jack

This jack accepts the standard stereo headphone plug. When you wish to listen through headphones alone, set the SPEAKERS switches (A and B) both at the OFF (\square) position.

SPEAKERS A/B switches

SPEAKERS A — Depressing this switch to the ON (__) position will connect the output circuits of the amplifier to the speaker systems connected to the SPEAKERS A terminals on the rear of the unit.

SPEAKERS B — Depressing this switch to the ON (__,) position will connect the output circuits of the amplifier to the speaker systems connected to the SPEAKERS B terminals on the rear of the unit.

To activate the speakers systems connected to the SPEAKERS A and B terminals, depress both the SPEAKERS A and B switches to the ON (__) position.

Note:

When speakers are connected only to the SPEAKERS A terminals, the sound will not be heard if both the SPEAKERS A and B switches are depressed to the ON position.

4 POWER indicator

Indicate the right and left output power up to 200 W (KM-207), up to 150 W (KM-107).

METER RANGE switch

When this switch is set to (\square) X0.1 position, the POWER indicator reading becomes a tenfold conversion.

When this switch is set to (__,) X1 position, the POWER indicator reading becomes normal scale.

In case of difficulty

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

AM, FM, PHONO or Tape playback	Cause	Remedy
Power on but no sound. (Indicator is OFF.)	Power cord not plugged in. Poor connection at wall outlet. Power outlet inactive.	 Check plug contact. Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch).
	Volume control set fully counter- clockwise. Protection circuitry operating.	3. Turn the control clockwise for optimum volume.4. Turn the POWER switch OFF, identify and remove the cause, and turn the POWER switch ON again.
No sound from left or right. (Indicator lights.)	 Speaker cords disconnected. Speakers switched off. No input selector switch is in use. 	 Check speaker connections. Check speaker switch. Check the control amplifier connected.
Sound from left or right, but not both.	 Poor speaker connections. Defective speaker. BALANCE set to one extreme or the other. 	 Check connections at both ends of speaker cord. Reverse speakers, if problem stays with speaker have speaker checked. Check the control amplifier connected.
Indicator on but no sound.	Speaker cords short circuited. Output cords short circuited.	Eliminate the cause and turn the POWER switch OFF and ON.

Specifications

IHF'66

– KM-107 –

Rated Power Output

125 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion.

monic distortion.	
Both channels driven	
(8 ohms, 1 kHz)	135 W + 135 W
Music Power	
(8 ohms)	250 W + 250 W
Total Harmonic Distortion	
20 Hz to 20,000 Hz	0.015% at 1/2 rated power
	into 8 ohms
1 kHz	0.002% at 1/2 rated power
	into 8 ohms
Inter Modulation Distortion	
(60 Hz:7 kHz = 4:1)	0.002% at rated power into
	8 ohms
Frequency Response	5 Hz to 200 kHz, +0 dB,
	-3 dB
Power Bandwidth	
(0.2 % T.H.D., 8 ohms)	10 Hz to 50 kHz
Signal-to-Noise Ratio (IHF-A)	120 dB (MAIN IN)
Damping Factor	
<u>-</u>	
General	
Power Consumption	4 A (USA and Canada)
	240 W (Others)
AC Outlets	Switched 2, Unswitched 1
	(Except some area)
Dimensions	
	H 123 mm (4-13/16")
	D 269 mm (10-9/16")
Weight (Net)	7.9 ka (17.4 lb)

- KM-207 ----

Rated Power Output

150 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion.

Both channels driven	
(8 ohms, 1 kHz)	155 W + 155 W
Music Power	
(8 ohms)	310 W + 310 W
Total Harmonic Distortion	
20 Hz to 20,000 Hz	0.015% at 1/2 rated power
	into 8 ohms
1 kHz	0.002% at 1/2 rated power
	into 8 ohms
Inter Modulation Distortion	
(60 Hz:7 kHz = 4:1)	0.002% at rated power into
	8 ohms
Frequency Response	5 Hz to 200 kHz, +0 dB,
	– 3 dB
Power Bandwidth	
(0.2 % T.H.D., 8 ohms)	
Signal-to-Noise Ratio (IHF-A)	120 dB (MAIN IN)
Damping Factor	More than 35 at 50 Hz
General	
Power Consumption	
	350 W (Others)
AC Outlets	•
	(Except some area)
Dimensions	
	H 123 mm (4-13/16")
	D 269 mm (10-9/16")

Weight (Net)8.5 kg (18.7 lb)

Note